

**Tentative Technical Program -more presentations are being added into technical sessions; -event time may be adjusted**

**The 35<sup>th</sup> International Symposium of the Society of Core Analysts**

**Sunday, Sept. 18, 2022**

Optional Golf Event

**Monday, Sept. 19, 2022**

**8:00 – 5:00 Registration Desk Open**

**9:00 am – 12: 30 pm**     **Short Workshop: Core Analysis in Carbon Geosequestration, Geothermal, and Nuclear-Waste Disposal**

9:00 am – 9:10 am     **Welcome and safety moment**

9:10 am - 10:00 am     **Flow in Porous Media in the Energy Transition**  
Martin J. Blunt

10:00 am - 10:50 am     **What Do We Need to Know for Designing A Reliable Carbon Storage Project?**  
Dengen Zhou

10:50 am - 11:10 am     coffee break

11:10 am – 11:50 am     **Core Analysis in Geothermal: Supporting the Energy Transition**  
Kevin McCarthy

11:50 am - 12:30 pm     **Core and Petrophysics Analysis as Complementary Datasets for Geological Disposal of Nuclear Waste at NAGRA**  
Garrard Rodney

12:30 pm - 1:30 pm     Lunch

1:30 pm - 3:00 pm     **Technical Session 1 – Improved SCAL Techniques and Interpretation 1**  
**Advanced Digital-SCAL Measurements of Gas Trapping in Sandstone**  
Ying Gao  
**Evaluation of NMR Derived Capillary Pressure Curves against Porous Plate Data for a Sandstone Reservoir**  
Sharanya Sharma

3:00 pm - 3:30 pm     Coffee Break

- 3:30 pm - 5:00 pm**      **Technical Session 2 – Displacement Mechanisms/EOR/IOR**  
**Displacement Stability Revisited – A New Criterion for The Onset of Viscous Fingering**  
Jos Maas
- 5:30 pm – 8:30 pm**      **Opening Reception**

## Tuesday, Sept. 20, 2022

**7:30 am – 5:00 pm** Registration Desk Open

- 8:15 am-10:00 am**      **Technical Session 3 – Laboratory Core Analysis 1**  
**Chalk Integrity Monitoring in Coupled Nuclear Magnetic Resonance- FBG Strain Sensing: Impact of Brine Composition**  
Lionel Esteban  
**THz Imaging to Map the Microporosity Distribution in Carbonate Rocks**  
Shannon L. Eichmann

10:00 am-10:30 am      Coffee Break

- 10:30 am – 12:00 pm**      **Technical Session 4 – Pore Scale Imaging and Modeling 1**  
**Innovations in Low UCS Core Acquisition and Quality Assessment Using Digital Rock Physics**  
Jennie Cook  
**An Integrated Workflow for Image-based Rock Physics Simulations**  
James J. Howard

12:00 pm – 1:00 pm      lunch

**1:00 pm – 3:00 pm**      **Poster Session 1 (Odd Numbers)**

3:00 pm – 3:30 pm      Coffee Break

- 3:30 pm – 5:00 pm**      **Technical Session 5 - Improved SCAL Techniques and Interpretation 2**  
**Spatially-Resolved T<sub>2</sub> NMR During Core Flooding for Obtaining Pc-T<sub>2</sub> Cutoff Relationships**  
Daan de Kort  
**Uncertainty in Measuring Capillary Pressure in Heterogeneous Core**  
Lesley James

**6:00 pm – 9:00 pm**      **Young Professionals Event**

## Wednesday, Sept. 21, 2022

7:30 am – 5:00 pm Registration Desk Open

8:15 am - 10:00 am **Technical Session 6 – Application of Artificial Intelligence/Machine Learning**

**A Critical Review of Artificial Intelligence and Machine Learning Used in Reservoir Characterization from Lithology Identification to Routine and Specialized Core Analysis**

Lesley A. James

10:00 am-10:30 am Coffee Break

10:30 am – 12:00 pm **Technical Session 7 – Wettability & others**

**The Thermodynamic Contact Angle Across Length Scales**

Maja Rücker

12:00 pm – 1:00 pm lunch

1:00 pm – 3:00 pm **Poster Session 1 (Even Numbers)**

3:00 pm – 3:30 pm Coffee Break

3:30 pm – 5:00 pm **Technical Session 8 - Pore Scale Imaging and Modeling 2**

**Pore-To-Core Characterization for Gas Injection in Carbonates**

Senyou An

**Uncertainty and Forced Imbibition Modelling Using the Morphological Method**

Pit Arnold

**Initial States of Coreflooding Techniques Evaluation: a Global Pore-Scale Investigation**

Franck Nono

6:30 pm -9:30 pm **Gala Dinner**

## Thursday, Sept. 22, 2022

7:30 am – 5:00 pm Registration Desk Open

8:15 am-10:00 am **Technical Session 9 – Unconventionals and Source rocks**

**Shale Characterization Using Magnetic Resonance T1-T2\* Relaxation Correlation and SPRITE Imaging Methods**

Bruce J. Balcom

**Measuring Gas Isotherms on Cutting Samples With NMR**

Michael Dick

10:00 am-10:30 am

Coffee Break

10:30 am – 12:00 pm

**Technical Session 10 - Laboratory Core Analysis 2**

**A Combinational NMR and Dielectric Technique Using Spectral NMR Mapped Distributions of Dielectric Relaxation**

James J. Funk

**Experimental Time-Lapse Visualization of Mud-Filtrate Invasion and Mudcake Deposition in Complex Rocks Using X-Ray Radiography**

Pierre Aérens

**Causal Protocols to Assess the Viability of Native State or Restored State Preparation**

Jules Reed

12:00 pm – 1:00 pm

lunch

1:00 pm – 2:40 pm

**Technical Session 11 - Pore Scale Imaging and Modeling 3**

**Pore Network Simulations Coupled with Innovative Wettability Anchoring Experiment to Predict Relative Permeability of a Mixed-Wet Rock**

Mohamed Regaieg

**Three-Phase Relative Permeability Derived from Specific Surface Area of Connected Pathways**

Adyani W. Razak

2:40 pm – 3:10 pm

Coffee Break

3:10 pm – 4:00 pm

**Technical Session 12 - Improved SCAL Techniques and Interpretation 3**

**Hybrid Technique for Setting Initial Water Saturation on Core Samples**

Victor Fernandes

**Wireless Acquisition for Resistivity Index in Centrifuge – WiRI: A Comparative Study of Three Pc-RI Methods**

Quentin Danielczick

4:05 pm

**Closing Remarks**

**Friday, Sept. 23, 2022**

**Optional field trip.**

**Trip Leaders:** Charlie Kerans, Brian Hunt, Charlotte Sullivan, and Toti Larsen